

AMENDMENTS TO THE CLAIMS:

1-20. Canceled

21. (Currently Amended) A method of delivering an aerosol to a patient, comprising:
forcing a pharmaceutically active liquid through a channel of a feeding source in a manner which causes the liquid to be expelled from an exit opening of the feeding source;
forcing a gas through a pressure chamber in a manner which causes the gas to exit the pressure chamber from an exit orifice in front of a flow path of the liquid expelled from the exit opening of the feeding source;
forming a stable liquid-gas interface between the liquid and the gas whereby ~~the liquid forms the gas surrounds and focuses the liquid into~~ a stable liquid jet focused on and exiting from the first exit orifice of the pressure chamber;
allowing the stable liquid jet exiting the exit orifice to form evenly shaped drops.

22. (Previously Presented) The method of claim 21, wherein the liquid has a viscosity in a range of from about 10^{-4} to about 1 kg/m/sec and the gas is air.

23. (Previously Presented) The method of claim 21, wherein the liquid has a viscosity in a range of from about 0.3×10^{-3} to about 5×10^{-2} kg/m/sec;
wherein the liquid is forced through the channel at a rate in a range of about 0.01 nl/sec to about 100 μ l/sec and further wherein the gas is forced through the opening of the pressure chamber at a rate in the range of from about 50 m/sec to about 2000 m/sec.

24. (Previously Presented) The method of claim 21, wherein the liquid is forced through the channel at a rate in a range of about 1 nl/sec to about 10 μ l/sec and further wherein the gas is forced through the opening of the pressure chamber at a rate in the range of from about 100 to 500 m/sec.

25. (Previously Presented) The method of claim 21, wherein the feeding source is a cylindrical channel and the liquid is expelled from an exit opening having a diameter in the range of from about 0.002 to about 2 mm and wherein the exit orifice in the pressure chamber has a diameter in

the range of about 0.002 to about 2 mm and is positioned directly in front of a flow path of the exit opening of the channel.

26. (Previously Presented) The method of claim 25, wherein the exit opening has a diameter in the range of from about 0.01 mm to about 0.4 mm, and

wherein the exit opening of the feeding source is separated by a distance of from about 0.01 to about 2 mm from the exit opening in the pressure chamber.

27. (Previously Presented) The method of claim 25, wherein the exit orifice in the pressure chamber has a diameter in the range of about 0.005 mm to about 0.25 mm, and

wherein the exit opening of the feeding source is separated by a distance of from about 0.002 to about 2 mm from the feeding point.

28. (Currently Amended) A method of delivering aerosolized particles of a pharmaceutically active drug to a patient, comprising:

feeding liquid formulation comprised of a pharmaceutically active drug through a liquid feeding source to an outlet;

feeding gas through an orifice positioned in front of the outlet in a direction aligned with a direction of flow out of the outlet;

maintaining the feeding of liquid and feeding of gas each at a rate relative to each other so as to maintain a stable microjet of liquid form a stable liquid-gas interface between the liquid and the gas whereby the gas surrounds and focuses the liquid into a stable liquid jet which exits the orifice; and

allowing the liquid microjet to form aerosolized particles having a size in the range of about 0.1 micron to about 10 microns.

29. (Previously Presented) The method of claim 28, wherein gas is forced into an area around the feeding source outlet at a pressure in the range of 10 to 50,000 mBar above atmospheric pressure and further wherein the liquid has a viscosity in the range of from 10^{-4} to 1 kg/m/sec.

30. (Previously Presented) The method of claim 29, wherein gas is forced into an area around the feeding source outlet at a pressure in the range of 100-2000 mBar above atmospheric pressure.

31. (Previously Presented) The method of claim 29, wherein gas from the pressure chamber surrounds liquid exiting the feeding source outlet which liquid is drawn into the orifice concentrically being focused by the gas flowing out of the outlet, and further wherein the aerosolized particles formed are uniform in size to the extent of having a relative size standard deviation of 3 to 30%.

32. (Previously Presented) The method of claim 28, wherein the particles are characterized by having the same diameter with a deviation in diameter from one particle to another in a range of from about $\pm 3\%$ to $\pm 30\%$.

33. (Previously Presented) The method of claim 32, wherein the particles have a size in a range of from about 1 micron to about 5 microns.

34. (Previously Presented) The method of claim 28, wherein the liquid is accelerated by tangential sweeping forces exerted by the gas flowing on a surface of the liquid and gradually decreasing a cross-section of the liquid forming the microjet.

35. (Previously Presented) The method of claim 28, further comprising:
inhaling the particles.

36. (Previously Presented) The method of claim 28, wherein the liquid formulation comprises water.

37. (Currently Amended) A method of delivering an aerosol to a patient, comprising:

forcing a liquid formulation comprising a pharmaceutically active drug in a carrier through a channel of a feeding source in a manner which causes the liquid to be expelled from an exit opening of the feeding source wherein the formulation has a viscosity in a range of from about 10^{-4} to about 1 kg/m/sec;

forcing a gas through a pressure chamber in a manner which causes the gas to exit the pressure chamber from an exit orifice in front of a flow path of a stream of the formulation expelled from the exit opening of the feeding source;

forming a stable liquid-gas interface between the stream of the formulation and the gas whereby the stream forms the gas surrounds and focuses the liquid into a stable liquid jet focused on and exiting from the first exit orifice of the pressure chamber;

allowing the stable liquid jet exiting the exit orifice to form evenly shaped drops;
and

inhaling the drops.

38. (Previously Presented) The method of claim 37, wherein the formulation has a viscosity in a range of from about 0.3×10^{-3} to about 5×10^{-2} kg/m/sec;

wherein the formulation is forced through the channel at a rate in a range of about 0.01 nl/sec to about 100 μ l/sec and further wherein the gas is forced through the opening of the pressure chamber at a rate in the range of from about 50 m/sec to about 2000 m/sec.

39. (Previously Presented) The method of claim 37, wherein the formulation is forced through the channel at a rate in a range of about 1 nl/sec to about 10 μ l/sec and further wherein the gas is forced through the opening of the pressure chamber at a rate in the range of from about 100 to 500 m/sec.

40. (Previously Presented) The method of claim 37, wherein the feeding source is a cylindrical channel and the formulation is expelled from an exit opening having a diameter in the range of from about 0.002 to about 2 mm and wherein the exit orifice in the pressure chamber has a diameter in the range of about 0.002 to about 2 mm and is positioned directly in front of a flow path of the exit opening of the channel.

41. (Previously Presented) The method of claim 40, wherein the exit opening has a diameter in the range of from about 0.01 mm to about 0.4 mm, and

wherein the exit opening of the feeding source is separated by a distance of from about 0.01 to about 2 mm from the exit opening in the pressure chamber.

42. (Previously Presented) The method of claim 40, wherein the exit orifice in the pressure chamber has a diameter in the range of about 0.005 mm to about 0.25 mm, and wherein the exit opening of the feeding source is separated by a distance of from about 0.002 to about 2 mm from the feeding point.